DETAILED ACTION

1. Claims 15-29 are pending.

Specification

2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01 VII. The URL on page 2, lines 12-13 of the specification must be deleted. Web addresses should not be included in Patents as the content of these websites may change over time and thus may no longer contain the information referred to by the Applicant. This revised content will also not represent the state of the art at the time of filing of the original application. It should also be noted that the web address referred to in this objecting is currently inactive and does not describe "high-bay warehouses and appertaining or shelf operating devices." See also 37 CFR 1.57(d).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 15-19, 23, 24, 28, and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauerwein et al (US Patent No. 6,213,025) in view of Upmeyer (US

Patent No. 6,148,752), Richardson (US Patent No. 3,881,581), Wood (US Patent No. 5,519,262) and Ansorge et al (US Patent No. 6,089,512).

Sauerwein et al teaches:

Re claim 15. (All limitation taught in claim 1 of Sauerwein et al except where noted otherwise) A lateral guidance transportation system, comprising:

at least one route including carrier elements and lateral guidance elements; and

at least one transportation vehicle arranged as a main vehicle and including a device adapted to automatically move the transportation vehicle along the at least one route, energy transferred to the transportation vehicle one of (a) by a primary circuit having a contact wire arranged along the at least one route and (b) in a contactless manner, the transportation vehicle including at least one satellite vehicle including a drive automatically movable along an additional route and adapted to transport goods;

wherein the additional route includes a satellite route section provided on the lifting platform for positioning and parking of the satellite vehicle on the lifting platform;

wherein the satellite route section is alignable by positioning the main vehicle on satellite routes arranged transversely (column 2, lines 11-15) to a main vehicle route, the satellite routes arranged on shelves (column 2, lines 22-24); and

wherein the satellite route section and the satellite routes include primary conductors.

Sauerwein et al fails to specifically teach: **(re claim 15)** the transportation vehicle including a lifting platform driven by a drive.

Upmeyer teaches, at the abstract, including a pallet vehicle fitted with a vertical, central mast so that it can raise satellite vehicles to high bay shelving in a storage facility, thus making good use of limited floor space.

In view of Upmeyer's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the lateral guidance transportation system as taught by Sauerwein et al, **(re claim 15)** the transportation vehicle including a lifting platform driven by a drive; since Upmeyer teaches lifting satellite vehicles to reach high bay shelving using a pallet vehicle for storage efficiency.

Sauerwein et al as modified by Upmeyer fails to specifically teach: **(re claim 15)** wherein the satellite route section and the satellite routes include primary conductors supplied with energy in a contactless manner from the main vehicle; **(re claim 16)** wherein the drive of the lifting platform is provided with energy in a contactless manner; **(re claim 18)** wherein energy is transferable at at least one place in a contactless manner by the main vehicle to at least one primary conductor of at least one shelf of at least one side aisle; **(re claim 23)** wherein the main vehicle is adapted to supply current to the primary conductor of the respective shelf.

Richardson teaches, at the abstract, column 3, lines 48-64 and column 4, lines 17-28, providing power to conductor buses for powering a load carrier by aligning a transfer vehicle with the appropriate aisle and making an electrical connection between

the transfer vehicle and the conductor buses. This ensures that inactive aisles are deenergized and thus prevents accidental injuries to personnel in the aisles, as well as preventing accidental collision of the load carrier and the transfer vehicle if the transfer vehicle is struck and moved from its intended position, and electrical wiring requirements are substantially minimized.

Wood teaches, at column 1, lines 10-18, that inductive power couplings are preferable over electrical contacts since they eliminate friction, arcing, wear, mechanical stress, and inaccessibility.

Ansorge et al teaches, at column 3, lines 8-17, that contactless transmission of electrical energy may be used to replace sliding contacts or trailing cables, and may be used in high-shelf storage facilities and elevators.

In view of Richardson, Wood, and Ansorge et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the lateral guidance transportation system as taught by Sauerwein et al, **(re claim 15)** wherein the satellite route section and the satellite routes include primary conductors supplied with energy in a contactless manner from the main vehicle; **(re claim 16)** wherein the drive of the lifting platform is provided with energy in a contactless manner; **(re claim 18)** wherein energy is transferable at at least one place in a contactless manner by the main vehicle to at least one primary conductor of at least one shelf of at least one side aisle; **(re claim 23)** wherein the main vehicle is adapted to supply current to the primary conductor of the respective shelf; since Richardson teaches supplying power from a transfer vehicle to the conductor buses to prevent injuries in inactive

aisles and to substantially reduce electrical wiring requirements, and Wood teaches using contactless power transfer to eliminate wear on the electrical connections. Additionally Ansorge et al teaches that vertically moving carriers may also benefit from receiving their power contactlessly to reduce wear. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to contactlessly power the primary circuit sections of travel sections 5 and 6 of Sauerwein et al (column 3, lines 62-65) when the sections are being raised and lowered as taught by Upmeyer.

Sauerwein et al additionally teaches:

Re claim 17. Wherein the drive of the satellite vehicle is supplied with energy in a contactless manner (column 6, lines 1-4).

Re claim 19. Further comprising at least one pick-up adapted to contactlessly transmit energy (column 2, lines 25-27).

Re claim 24. Wherein at least one pick-up includes one of (a) a U-shaped ferrite core (column 2, line 43), (b) a C-shaped ferrite core and (c) an E-shaped ferrite core.

Re claim 28. Wherein the primary line is arranged one of (a) as an outgoing line and a return line and (b) as an outgoing line and an at least partially surrounding profile. (The contactlessly powered satellites can move away from and back to the host vehicle along their tracks, so the primary circuit must be outgoing and returning.)

Re claim 29. Wherein at least one of the drives includes at least one of (a) an electric motor and (b) a geared motor. (column 4, lines 33-35, the motor runs on electricity.)

5. **Claims 20-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauerwein et al (US Patent No. 6,213,025) as modified by Upmeyer (US Patent No. 6,148,752), Richardson (US Patent No. 3,881,581), Wood (US Patent No. 5,519,262), and Ansorge et al (US Patent No. 6,089,512) as applied to claim 15 above, and further in view of Kelley et al (US Patent No. 4,833,337).

The teachings of Sauerwein et al as modified by Upmeyer, Richardson, Wood and Ansorge et al have been discussed above. Sauerwein et al as modified by Upmeyer, Richardson, Wood and Ansorge et al fails to specifically teach: **(re claim 20)** wherein the main vehicle includes a power supply unit adapted to feed a primary line provided on the main vehicle inductively coupled to a pick-up connected to a terminal box adapted for impedance compensation and which feeds at least one primary line provided in the satellite route section.

Kelley et al teaches, at column 2, lines 16-18, impedance compensation for an inductive pickup.

In view of Kelley et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the lateral guidance transportation system as taught by Sauerwein et al as modified by Upmeyer, Richardson, Wood and Ansorge et al, **(re claim 20)** wherein the main vehicle includes a

power supply unit adapted to feed a primary line provided on the main vehicle inductively coupled to a pick-up connected to a terminal box adapted for impedance compensation and which feeds at least one primary line provided in the satellite route section; since Kelley et al teaches impedance compensation is necessary for an inductive power pickup, and it is well known to enclose electronics in terminal boxes to protect them from the harsh conditions outside.

Re claim 21. Sauerwein et al as modified by Upmeyer, Richardson, Wood, Ansorge et al and Kelley et al teaches the claimed invention except for arranging a pick-up in a floor. It would have been an obvious matter of design choice to place a pick-up in a floor since applicant has not disclosed that placing a pick-up in a floor solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the pick-up at any location.

Re claim 22. Richardson teaches including a pick-up at the shelve at Figure 1.

6. **Claim 25** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sauerwein et al (US Patent No. 6,213,025) as modified by Upmeyer (US Patent No. 6,148,752), Richardson (US Patent No. 3,881,581), Wood (US Patent No. 5,519,262) and Ansorge et al as applied to claim 15 above, and further in view of Koyama et al (US Patent No. 6,583,697).

The teachings of Sauerwein et al as modified by Upmeyer, Richardson, Wood and Ansorge et al have been discussed above.

Sauerwein et al as modified by Upmeyer, Richardson and Wood fails to specifically teach: **(re claim 25)** wherein at least one pick-up includes a flat winding.

Koyama et al teaches, at column 2, lines 6-13, using a flat winding to reduce the size of electrical components.

In view of Koyama et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the lateral guidance transportation system as taught by Sauerwein et al as modified by Upmeyer, Richardson, Wood and Ansorge et al, **(re claim 25)** wherein at least one pick-up includes a flat winding; since Koyama et al teaches using flat windings reduces the size of electrical components.

7. **Claims 26 and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauerwein et al (US Patent No. 6,213,025) as modified by Upmeyer (US Patent No. 6,148,752), Richardson (US Patent No. 3,881,581), Wood (US Patent No. 5,519,262), Ansorge et al (US Patent No. 6,089,512) and Koyama et al (US Patent No. 6,583,697) as applied to claims 15 and 25 above, and further in view of Lin et al (US Publication No. 2001/0006364).

The teachings of Sauerwein et al as modified by Upmeyer, Richardson, Wood, Ansorge et al and Koyama et al have been discussed above. Koyama et al additionally teaches a ferrite core at column 3, lines 36-40.

Sauerwein et al as modified by Upmeyer, Richardson, Wood, Ansorge and Koyama et al fails to specifically teach: **(re claims 26 and 27)** an E-shaped core wherein the legs are shorter than the distance between legs.

Lin et al teaches, at Figure 8, an E-shaped core with legs shorter than the distance between legs.

In view of Lin et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the lateral guidance transportation system as taught by Sauerwein et al as modified by Upmeyer, Richardson, Wood, Ansorge et al and Koyama et al, **(re claims 26 and 27)** an E-shaped core wherein the legs are shorter than the distance between legs; since Lin et al teaches that this configuration allows for a more low profile configuration of components.

Response to Arguments

8. The Provisional Double Patenting Rejection of claims 15-29 has been withdrawn. Application Number 11/631203, upon which the double patenting rejection was based, has been abandoned.

9. Applicant's arguments filed 10/29/2009 have been fully considered but they are not persuasive. The objection to the web address in the specification remains. Removing "http://" from the address does not make the web address permissible.

10. Applicant's arguments with respect to claim 15 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that claim 15 as amended requires "that primary conductors of both a satellite route section, which is

provided on a lifting platform, as well as satellite routs, which are arranged on shelves, are supplied with energy in a contactless manner from a main vehicle" and further argues that the prior art does not teach these limitations. However, as discussed above, Sauerwein teaches a satellite route section and satellite routes on shelves which have primary conductors at column 3, lines 59-65. The satellite route section is powered by the main vehicle. Upmeyer teaches a lifting platform which is used to lift the satellite vehicles at Figure 2. The satellite vehicles drive on and off of this lifting platform, so the platform would still have the primary conductors of Sauerwein. Ansorge teaches contactlessly powering such a lifting platform to reduce wear at column 3, lines 8-17. Richardson teaches powering the currently active shelf from the main vehicle at Figure 1, and Wood teaches using contactless power transfer to eliminate wear at column 1, lines 10-18.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SPENCER PATTON whose telephone number is (571)270-5771. The examiner can normally be reached on Monday-Thursday 7:30-5:00; Alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on (571)272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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